

# TECHNICAL DATASHEET

Issue date:  
 March 2024

## SELEMIX® DIRECT PRO HIGH GLOSS 7-159

### PRODUCT DESCRIPTION

*Selemix Direct Pro High Gloss* is a versatile, high solids 2-pack Acrylic PU finish that can be applied directly to a variety of substrates without need for a primer, giving a very efficient process.

It has a high gloss finish with good colour and UV stability. Its good anticorrosive properties make it suitable for the finishing and protection of machinery, agricultural and construction equipment, and many other industrial painting applications.

### PRODUCTS

7-159 *Selemix Direct Pro High Gloss Mixed Colour*

#### Hardeners:

9-152 Slow Hardener for Acrylic  
 9-154 Medium Hardener for Acrylic  
 9-158 Fast Hardener for Acrylic

#### Thinners:

1-159 Reactive Thinner For Acrylic  
 1-160 Slow Reactive Thinner for Acrylic

#### Additive:

6-115 Flexible Additive

### SUBSTRATES AND PREPARATION




Steel (Blast Cleaned)	Blast clean to ISO 8501-1 SA 2.5 with a blast profile of maximum 40 µm Rz
Steel / Stainless Steel	Machine sand with P80-120 discs and degrease
Galvanised steel	Abrade with SCOTCHBRITE® and degrease
Aluminium	Machine sand with P240-320 discs and degrease
Painted Surfaces	Machine sand with P240-320 discs and degrease
<i>Selemix</i> Epoxy or PU Primer	Refer to Primer TDS for recoat time
GRP	Machine sand with P240-320 discs and degrease
Plastics (PA, PC, ABS, PC/ABS, PMMA, PVC) PP	Abrade with SCOTCHBRITE® and degrease PP must be flame treated before painting

Apply only on a clean and dry surface with a temperature above the dew point to avoid condensation. In confined spaces, provide adequate ventilation during application and drying.




## MIXING

Thoroughly mix paint before activating and check colour before use




Features	Conventional	Air-Assisted Airless
 <p><b>By Weight:</b> 7-159 Topcoat 9-15x Hardener 1-159 / 1-160 Thinner</p>	<p>1000 330 100 - 200</p>	<p>1000 330 50 - 100</p>
 <p><b>By Volume:</b> 7-159 Topcoat 9-15x Hardener  1-159 / 1-160 Thinner</p>	<p>2.5 1  0.3 – 0.5 (10-20%)</p>	<p>2.5 1  0.1 – 0.3 (5-10%)</p>
 <p>Viscosity (at 20°C):  Pot Life (at 20°C):</p>	<p>28-35 secs DIN4  2.5-3 hours</p>	<p>35-45 secs DIN4  1.5-2 hours</p>

## FOR 2K PLURAL-MIX EQUIPMENT:

For 2K Plural-Mix equipment, the paint must be pre-thinned with thinner as below and used through plural mix equipment to mix the hardener. Always use 9-152 Hardener.

Features	2K Plural-Mix	
	Conventional Spray (Low Pressure)	Air-Assisted Airless Spray
 <p>Pre-Thinning of Topcoat</p>	<p>Mix 7-159 with Thinner 2.5 : 0.5 by volume or 1000:200 by weight</p>	<p>Mix 7-159 with Thinner 2.5 : 0.3 by volume or 1000:100 by weight</p>
 <p>Mixing of Hardener at Plural-mix pump</p>	<p>Mix prethinned Paint 3:1 by volume with 9-152 Hardener</p>	<p>Mix prethinned Paint 2.8:1 by volume with 9-152 Hardener</p>
 <p>Viscosity (RFU at 20°C):</p>	<p>28-35 secs DIN4</p>	<p>40-45 secs DIN4</p>

## APPLICATION

	Features	Conventional	Air-Assisted Airless
	Spraygun setup:	Nozzle: Gravity: 1.8mm Suction: 1.8-2.0mm Pressure feed: 1.2-1.4mm	Nozzle: 09-11 thou 0.23-0.28mm
	Air Pressure: (refer to spraygun manufacturer)	HVLP: 2 Bar Standard: 2.5-3 Bar	2.5 Bar
	Fluid Pressure:	N/A	100 Bar
	Number of coats:	2	2 (or 1 Visit)
	Flash-off between coats:	15 mins	15-20 mins (or 2 mins for 1 Visit)
	Drying:	Air dry or bake at 50°C for 30-45 mins	Air dry or bake at 50°C for 30-45 mins
	Flash-off before bake:	10-15 mins	10-15 mins
	Wet Film Thickness:	150-175 microns (2 x 75 -100 µm)	150-175 microns (120-130 µm 1 Visit)
	Dry Film Thickness:	90-110 microns	90-110 microns (70-80 µm 1 Visit)

**500**

## DRYING TIMES



at 20°C

Dust Free Touch Free Tape Free Handleable Hard Dry	20 mins (or 15 mins with Fast Hardener) 3 hours (or 2 hour with Fast Hardener) 6 hours (or 3 hours with Fast Hardener) 8-10 hours (or 5-6 hours with Fast Hardener) 16 hours (or 12-14 hours with Fast Hardener)
Stoving:	30 minutes at 50°C (according to film thickness)
Overcoating time:	Minimum: when Hard Dry Maximum: 1 month by itself without sanding
Note:	Lower temperature or film thickness higher than 100µm will extend drying times

## STRUCTURED / TEXTURED FINISH

A structured / textured finish can be achieved with Selemix Direct Pro using the following process.

1. Apply a first coat of 7-159 as normal, ensuring that the film thickness is sufficient to cover and protect the substrate.
2. Allow 30 mins flash-off time at 20C
3. Mix the 7-159 Direct Pro 2.5:1:0-0.5 with 9-15X Hardener and 1-159 Thinner  
More thinner will give a finer texture and less thinner will give a coarser texture.
4. Apply a coat using a gravity gun with a 1.8-2.5mm tip at 0.1-0.3 Bar pressure  
Lower pressures will give a coarser texture, higher pressures, a finer texture
5. Air dry, or allow 15 mins flash-off before baking.

## FLEXIBILISING

**Selemix Direct Pro can be flexibilised to give improved flexibility and mechanical properties**

Mixed Colours in 7-51X Direct Pro are mixed 1000 : 20 by weight with 6-115 Flexible Additive (2% by weight)

The Selemix Direct Pro should then be activated and thinned as normal.

## TECHNICAL DATA

Based on ready-for-use mixed paint including thinner:	Conventional Spray	Air-Assisted Airless Spray
VOC (g/L):	367-407 g/L	338-381 g/L
Solid content (weight):	63-70%	66-73%
Solid content (volume):	55-60%	58-63%
Solvent content (weight):	30-37%	27-34%
Specific gravity (Ready for use)	1.11-1.24 Kg/L	1.12-1.25 Kg/L
Theoretical coverage at 100 microns DFT:	5.5-6.0 m <sup>2</sup> /L	5.8-6.3 m <sup>2</sup> /L
Theoretical coverage at 100 microns DFT:	4.4-5.4 m <sup>2</sup> / Kg	4.6-5.6 m <sup>2</sup> / Kg
Theoretical solvent emission per sq. m at 100 microns DFT:	61-70 g per m <sup>2</sup>	54-66 g per m <sup>2</sup>
Gloss:	High Gloss	High Gloss

## PRODUCT CODES AND DESCRIPTIONS

Selemix Code	Short Code	Product Description	Packsize	
7-159/E3.75K	7-159	Direct Pro High Gloss	3.75	Kg
7-159/E15K	7-159	Direct Pro High Gloss	15	Kg
9-152/E1	9-152	Slow Hardener For Acrylic	1	Lt
9-152/E5	9-152	Slow Hardener For Acrylic	5	Lt
9-154/E1	9-154	Medium Hardener For Acrylic	1	Lt
9-154/E5	9-154	Medium Hardener For Acrylic	5	Lt
9-158/E1	9-158	Fast Hardener For Acrylic	1	Lt
9-158/E5	9-158	Fast Hardener For Acrylic	5	Lt
1-159/E5	1-159	Reactive Thinner For Acrylic	5	Lt
1-160/E5	1-160	Slow Reactive Thinner For Acrylic	5	Lt
6-115/E1	6-115	Flexible Additive	1	Lt

## HEALTH AND SAFETY

For comprehensive Health, Safety and Environmental advice, please refer to the relevant Material Safety Data Sheets and Product can labels.

## THIS PRODUCT IS FOR PROFESSIONAL USE ONLY

The information given in this sheet is for guidance only. Any person using the product without first making further enquiries as to the stability of the product for the intended purpose does so at his own risk and we can accept no liability for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of such use. The information contained in this sheet is liable to modification from time to time in the light of our experience and our policy of continuous product development. Drying times quoted are average times at 20°C. Film thickness, humidity and shop temperature can all affect drying times.

### FOR FURTHER INFORMATION PLEASE CONTACT:

Selemix Customer Service and Sales Group  
 Needham Road  
 Stowmarket, Suffolk  
 IP14 2AD, England  
 Tel: 01449 771771